

PROJECT TITLE : CIGARETTE DEVELOPMENT 4  
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#### 405 GAMMA ULTRA

##### Objective

To extend the GAMMA family by a king-size American type cigarette having the following smoke yield :

TAR : 1.5 mg/cig.

SN : 0.15 mg/cig.

##### Summary

Following the presentation of prototypes Nos 15 P to 22 P to Committee B, a new series of samples was produced using two tobacco blends, different AC concentrations and three cigarette papers.

##### Description of samples and results

The two tobacco blends used in this new series of prototype )  
Nos 23 P to 38 P were :

- 1) PMS tobacco with 25 % of ET Onnens
- 2) A new recipe of a tobacco blend having the following types of tobacco :

Blend code	FR0240501N02
FC	21 %
Burley	25 %
Orient	7 %
ET Onnens	27 %
Add. stems	20 %

These two tobacco blends were divided into two batches :

- 1) PMS 810 A and 810 B
- 2) The new recipe 811 A and 812 B

In these two batches, the AC concentrations are of  
20 l / 1'000 kg of total blend for series A and of  
26 l / 1'000 kg of total blend for series B.

The analytical results of the most interesting prototypes are stated in the table below :

Prototype No		23 P	24 P	32 P	37 P
TAR	mg/cig.	1.7	1.5	1.6	1.6
SN	mg/cig.	0.19	0.17	0.14	0.15
CO	mg/cig.	2.7	3.4	1.8	3.1
NO	mg/cig.	0.06	0.06	0.04	0.06
Total aldehydes	mg/cig.	0.3	0.3	0.2	0.4
Puff count		8.6	8.1	8.3	9.3
Dilution US	%	68	68	75	70
Filter		Double*	Double*	PMS	Double
Cigarette paper		110-6	708	708	W 20
* : PME code : 34.5565-D					

Prototypes Nos 23 P, 24 P and 32 P were produced using the PMS tobacco blend of series B (26 l / 1'000 kg of AC).

In this series, the 4 M. 2.0.1.1 tipping paper from Malau-cène was used in order to obtain the high dilution level necessary for this type of product.

Committee B recommends prototype 23 P to be presented to the Marketing Department of Area III.

#### 404 ALFA

##### Objective

To re-engineer the MERCEDES KS brand in order to obtain the following smoke yield :

DPM :  $\leq$  16 mg/cig.

SN :  $\leq$  1 mg/cig.

##### Summary

In March 1981, the first series of prototypes was repeated with 100 mg greater tobacco weight in order to reproduce the same conditions of the current production of MEK in Italy.

#### Description of samples and results

This new series of prototypes with 100 mg greater tobacco weight than the current specifications of MERCEDES was analysed and taste evaluated.

Two prototypes were selected by Panel A. They will be presented to the Marketing Department of Area III with the following planned modifications :

##### 1st phase (short-time) (using-up of current filters)

Combination of the current raw materials (tipping and cigarette papers, filter) with a new recipe of tobacco blend (IT0340401N02).

##### 2nd phase (long-time) (after using-up of MEK filters)

A new double filter with 30 % less Silicagel and the mouth-end plug having a 2.5/48'000 Y tow instead of the former 5.0/46'000 I.

The other raw materials will remain the same as those of the 1st series.

#### 389 EXIT

##### Objective

To reproduce the dilution system of the BARCLAY cigarette.

##### Summary

In order to find a Pan Europe-type blend for this project, different prototypes were produced using three tobacco grades (Orient, flue-cured and burley) and two filters received from the USA (4 and 6 grooves). They were taste evaluated by the expert panel.

##### Description of samples and results

Except for the flue-cured grades, pure tobacco grades combined with the EXIT dilution system did not seem to be influenced by this system.

On this basis, cigarettes with filters having 4 and 6 grooves were produced with the following blends :

Filter 4 grooves : Blend MLF  
Filter 6 grooves : Blend MLF  
Filter 4 grooves : Blend PMS  
Filter 6 grooves : Blend PMS  
Filter 4 grooves : Blend PMS + 30 % of AC (PMS)  
Filter 6 grooves : Blend PMS + 30 % of AC (PMS)

Among these blend combinations, the expert panel preferred the filters having 4 grooves.

Follow-up

The development of this project will continue with an MLF-type blend without expanded stems and without expanded tobaccos.

A study on other blends will still have to be made (MAA, MEK, BSZ, CAMBRIDGE), as well as on the expanded FC tobacco.

*Drüml*

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